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Viscoelastic Foam-Filled Lattice for High Energy Absorption

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Highlights

- Composite foam concept that involves infiltrating a polymer foam through a lattice was introduced.
- Composite foam allows several energy absorbing mechanisms to operate synergistically and sequentially at varying length scales.
- Displays high strain rate sensitivity and recoverable compressibility of up to 80% strain.
- Exhibits high energy absorption at both low (0°C) and high temperatures (40°C).

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